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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,734

05/23/2005

Harry J Last

1693.23 US National

6782

7590

07/10/2006

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EXAMINER

LAZO, THOMAS E

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,734	<b>Applicant(s)</b> LAST, HARRY J	
	<b>Examiner</b> Thomas E. Lazo	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 5 is objected to because of the following informalities:

In claim 5, line 7, --of-- should be inserted after "plenum". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schanzlin et al. (2,657,533). Schanzlin et al. discloses a hydraulic circuit with a reversible hydraulic power source 10, a dual, coupled check valve 17, a manifold, check valve poppets, a translating rod 52, a hydraulic cylinder 23, pressure relief valves 24,25, a shuttle valve 11, and a single pressure relief valve 26 in communication with the shuttle valve 11, wherein the hydraulic liquid pumped from a port of the reversible hydraulic power source 10 seats the check valve poppet on the valve seat translating the translating rod 52 preventing the other check valve poppet from seating on the other valve seat for allowing the reversible hydraulic power source 10 to pump or make up fluid and for allowing excess liquid to flow to the reservoir 15 without tripping a pressure relief. Schanzlin et al. does not disclose using check valve balls in place of check valve poppets.

Since the applicant has not disclosed that having check valve balls solves any stated problem or is for any particular purpose above the fact that it performs the function of a check valve and it appears that the check valve poppets of Schanzlin et al. would perform equally well with check valve balls as claimed by applicant, it would have been an obvious matter of engineering expedience to further modify the check valve poppets of Schanzlin to be check valve balls as claimed for the purposes of performing the check valve function.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Last in view of Schanzlin et al. Last discloses a hydraulic circuit with a reversible hydraulic power source, check valves 51, a manifold, check valve balls, pressure relief valves 56, and dual hydraulic reversible hydraulic motors 42,43 to drive a winding system that translates a structure. Last does not disclose a translating rod, a shuttle valve, and a single pressure relief valve in communication with the shuttle valve, wherein the hydraulic liquid pumped from a port of the reversible hydraulic power source 10 seats the check valve poppet on the valve seat translating the translating rod preventing the other check valve poppet from seating on the other valve seat for allowing the reversible hydraulic power source to pump or make up fluid and for allowing excess liquid to flow to the reservoir without tripping a pressure relief.

Schanzlin et al. teaches for a hydraulic circuit with a reversible hydraulic power source 10, check valves 51, a manifold, check valve poppets, pressure relief valves 24,25, and a hydraulic cylinder 23 and that there is a translating rod 52, a shuttle valve 11, and a single pressure relief valve 26 in communication with the shuttle valve 11, wherein the hydraulic liquid pumped from a port of the reversible hydraulic power source 10 seats the check valve poppet on

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the valve seat translating the translating rod 52 preventing the other check valve poppet from seating on the other valve seat for allowing the reversible hydraulic power source 10 to pump or make up fluid and for allowing excess liquid to flow to the reservoir 15 without tripping a pressure relief for the purposes of controlling the rate of movement of the cylinder. See Schanzlin col. 1, lines 1-7.

Since Last and Schanzlin are both hydraulic circuits with reversible hydraulic power sources that drive a motor, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the hydraulic circuit of Last, based on the teachings of Schanzlin, to include a translating rod, a shuttle valve, and a single pressure relief valve in communication with the shuttle valve, wherein the hydraulic liquid pumped from a port of the reversible hydraulic power source seats the check valve poppet on the valve seat translating the translating rod preventing the other check valve poppet from seating on the other valve seat for allowing the reversible hydraulic power source to pump or make up fluid and for allowing excess liquid to flow to the reservoir without tripping a pressure relief for the purposes of controlling the rate of movement of the translated structure.

***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Prior Art***

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of three patents.

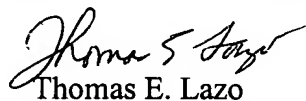
Mentink, Huber, and Ruhl are cited to show hydraulic circuits with reversible hydraulic power sources.

***Contact Information***

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas E. Lazo

Primary Examiner

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June 28, 2006